

FOV (TFOV) is thus increased roughly according to the number of the image fractions. The seamless integration of the images, from plurality of fractions of an image to a whole image, becomes possible due to the high rate, time-integration performed by the eye of the viewer and viewed as one wide image. Seamless integration of the different fractions of the full image become possible also by using known techniques such as creating the fractions so as to slightly overlap each other, and by controlling the intensity of the image of each fraction in the overlap zone to gradually decrease as the distance to the edge of the image fraction becomes smaller.

Please replace the paragraph beginning on page 4, line 24 with the following rewritten paragraph:

The image redirector 40 may be one of:

- tilting mirror, or
- electro-optic lens - liquid crystal based diffractive lens, which receives electrical impulses for different reflective or deviated angles (such as Electrically Switchable Holographic Optical Element (ESHOE) by DigiLens Technologies Inc. of Sunnyvale, CA, USA), or Hologram.

Digital Micromirror Device (DMD) or Digital Light Processing (DLP) made by Texas Instruments or Light Valve Mirror (LVM) made by IBM montation or similar with two stages (black & white pictures),

or any other type of device that can switch \ divert the light from one direction to more than one direction.

Please replace the paragraph beginning on page 5, line 19 with the following rewritten paragraph:

Reference is now made to Fig. 2B, a time sequential of the operation of the apparatus detailed in Fig. 2A, when operating as time domain device (i.e. an operation in which the different fractions of the image employ different time slots for projection). Note that the top line depicts the selective image fractions produced by image source unit 30, first image 101 and second image 201, and the bottom line depicts the reflective position of the image redirector 40, image 101 to the left and image 201 to the right. Thus, it is clear that the image

source 30 has to be synchronized with the image redirector when operating as a time-domain device. It should be noted that the examples depicted in Figs. 2A and 2B employ two fractions of an image, but the invention is not limited by this example, and the total image may be combined of more than two fractions.

Please replace the paragraph beginning on page 6, line 5 with the following rewritten paragraph:

Fig. 3 is a schematic illustration of an alternative embodiment of the present invention. The image produced in image source 30 is divided into two complementary frames, 72 with polarization P, and 74 with polarization S. Frame 72 represents the fraction of the source image that corresponds to the first section on visor 15. Frame 74 represents the fraction of the source image that corresponds to the second section on visor 15. Both frames are projected through an optical combiner 70, and their respective out going optical lines 82 and 84 are projected simultaneously along a common optical axis from the optical combiner 70 through the relay optics 10 and optionally via an Electro Optical (EO) lens 76. The optical combiner 70 may be any of the existing combiner / splitter such as those manufactured and distributed by KARL Lambrecht Co. Chicago, IL, USA. The need for EO lens is dependent on the embodiment of the image redirector 40, as will be explained below. When the EO lens 76 is in use, its activity is synchronized with the image source so as to allow the free passage of only one of the frames, 72 or 74. The image received from relay optics 10, whether projected via EO lens 76 or not, is then projected through image redirector 40.

Please replace the paragraph beginning on page 7, line 10 with the following rewritten paragraph:

Fig. 4B illustrates another embodiment of the current invention, in which image redirector 40 of Fig. 2A (not shown) is embodied by an optical device 92 (such as, for example, a wedge with two polarization-dependent reflective planes). In this embodiment, the reflection angle depends only on the polarization of the image, hence two images 72 and 74 are projected continuously onto device 92, and are reflected in different directions (82' and 84') respectively to visor 15, so as to compose a seamless, wide FOV angle, full image of the two polarized fractions of the source image. The FOV angle of the composed image equals substantially to twice the original FOV angel of the relay optics. In this embodiment the EO

lens is not needed, since no switching in time is employed. In this embodiment no time-alternation is employed.

Please replace the paragraph beginning on page 8, line 3 with the following rewritten paragraph:

It is noted that the embodiment depicted in Fig. 4A provides time integration of the produced image. Conversely, the embodiment depicted in Fig. 4B allows for integration in space.

Please replace the paragraph beginning on page 8, line 9 with the following rewritten paragraph:

In yet another embodiment, the distinction of one image fraction from another may be done using different wavelengths for each image fraction. In this embodiment image source 30 and image redirector 40 of Fig. 2A may employ cut-off filters to eliminate undesired images in time-domain using wavelength based filters, providing for ability to produce color images.

Please replace the paragraph beginning on page 9, line 2 with the following rewritten paragraph:

In yet another embodiment, the outer visor surface may get an "opposite" optical power to generate a normal (optical power "0") see-through capability. This can be done by implementing diffractive optics on the visor's outer side.

Please replace the paragraph beginning on page 9, line 6 with the following rewritten paragraph:

Using the same optical relay 10 to achieve a non-distorted wide-FOV imagery, the field correction can be done by reverse-image correction manipulation on the image source such that the projected image to the eye will be non-distorted, or the correction can be done on the reflected element 15 (visor/combiner) by using a powered reflected optical element such as diffractive, hologram, binary optics.